Technical Assistance Document

Assistive Technology for Children and Youth with Disabilities

IDEA Part B

oklahoma state department of education



Oklahoma State Department of Education Special Education Services

May 2008

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State Superintendent of Public Instruction

This document was created in collaboration with:

Oklahoma Assistive Technology Center

and

Oklahoma ABLE Tech

Assistive Technology in Public Schools

Definition of Assistive Technology

INDVIDUALS WITH DISABILITIES EDUCATION IMPROVEMENT ACT

The federal regulations for implementation of the Individuals with Disabilities Education Improvement Act (IDEA) defines assistive technology (AT) devices and services as follows:

34 CFR §300.5 Assistive Technology Device

"Assistive technology device means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of such device."

34 CFR §300.6 Assistive Technology Service

"Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes:

- (a) The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
- (b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by children with disabilities;
- (c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- (d) Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- (e) Training or technical assistance for a child with a disability or, if appropriate, that child's family; and,
- (f) Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child."

The 2004 reauthorization of IDEA maintains a requirement for Individualized Education Program (IEP) teams to consider the assistive technology needs of students during the development of an IEP. This most recent requirement states:

34 CFR §300. 24(a)(2) Development, Review, and Revision of IEP

(2) Consideration of Special Factors.

"The IEP Team shall — (v Consider whether the child needs assistive technology devices and services."

The IDEA requires schools to provide AT if it is needed for a student to receive a free appropriate public education (FAPE). FAPE can include a variety of services such as special education, related services, supplementary aids and services, program modifications or support for school personnel. AT, just like all other components of FAPE, must be provided at no cost to parents. Schools must provide or pay for any AT necessary to ensure FAPE either directly or through contract or other arrangements. The schools may not unnecessarily delay the provision of AT devices and services due to funding issues if a child requires the devices and services to benefit from the IEP. The specific IDEA requirement for schools to provide AT is as follows:

34 CRF §300.105 Assistive Technology

- "(a) Each public agency must ensure that assistive technology devices or assistive technology services, or both, as those terms are defined in Sec. 300.5 and 300.6, respectively, are made available to a child with a disability if required as a part of the child's--
 - (1) Special education under Sec. 300.36;
 - (2) Related services under Sec. 300.34; or
 - (3) Supplementary aids and services under Sec. 300.38 and 300.114(a)(2)(ii).
- (b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE."

34 CFR §300.17 Free appropriate public education

- "Free appropriate public education or FAPE means special education and related services that -
- (a) Are provided at public expense, under public supervision and direction, and without charge;
- (b) Meet the standards of the SEA, including the requirements of this part;
- (c) Include an appropriate preschool, elementary school, or secondary school education in the State involved; and
- (d) Are provided in conformity with an individualized education program (IEP) that meets the requirements of Sec. 300.320 through 300.324."
- **34 CFR §300.44. Universal design** has the meaning given the term in section 3 of the Assistive Technology Act of 1998, as amended, 29 U.S.C. 3002. The definition of *Universal design* means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are interoperable with assistive technologies.

Determination of Assistive Technology Needs by the IEP Team

IEP teams are responsible for determining whether or not children need AT devices and services to benefit from their educational program.

- The IEP team determines the need for AT devices and services on an individual basis. The determination must not be based upon a category, severity, or class of disability.
- AT devices and services must be provided as indicated on the IEP. The IEP team must specify what, if any, AT devices and services are needed.

Assistive Technology Consideration

IEP teams might consider developing a list of questions to assist team members in determining if a child needs AT. Questions may include, but are not limited to, the following:

- Is the student able to produce written work efficiently and progress in the general curriculum or IEP goals?
- Is the student able to communicate effectively?
- Is the student able to sit independently? Stand independently? Walk independently?
- Is the student able to feed him or herself independently?
- Is the student able to participate in activities such as art or music with the tools or items readily available in the classroom, or does the student need adaptations, e.g., to hold a paintbrush independently?
- Is the student able to read effectively and at a pace similar to that of peers?
- Is the student able to learn effectively in the classroom, or would particular software programs or other technologies enable the student to learn academic material more effectively?
- Do the mechanics of producing work interfere with the quality of work produced by the student? For example, is the act of writing so difficult for the student that the quality of written work is substantively affected and the student loses focus on the content?

All children and youth with disabilities are not required to receive AT devices and services. However, the IEP team must consider the need for AT devices and services for all children with disabilities to benefit from a free, appropriate public education.

Assistive Technology Evaluation

Assistive technology evaluation can occur as part of the student's educational evaluation or reevaluation. Parents or other team member can request an assistive technology evaluation at any time. IEP teams should consider assistive technology devices and services in the consideration of special factors section of every IEP. Some students will not require technology to meet the goals on their IEPs, but many students will benefit from the use of AT. IEP teams must determine if the AT is necessary for the student to achieve goals, benefit from education, or make reasonable progress in the general curriculum. The team should analyze what is required of students without disabilities of the same age and determine how many of the requirements the student with a disability could completely or partially achieve, if that student had access to appropriate AT.

The IEP is a tool to plan, implement and evaluate progress in special education and related services for students with disabilities, and must be reviewed and revised annually. IEP teams must assess the student's need for AT on an individual basis.

Assistive Technology in the IEP

When the IEP team recommends an AT device to be a part of the IEP, a brand name of the specific device does not have to be listed on the IEP. IEP teams must ensure that the student gets the device he/she needs. The IEP may find that listing a complete description of the necessary AT device features is beneficial.

AT may be included in various places on the IEP a statement of:

- The child's present levels of educational performance,
- Measurable annual IEP goals, including, short-term objectives or benchmarks,
- The special education and related services, and supplementary aids and services to be provided to the child, or on behalf of the child, and a statement of the program modification or supports for school personnel that will be provided for the child,
- Any individual modifications in the administration of State or districtwide assessments of student achievement that are needed in order for the child to participate in such assessments, and
- Special factors to be considered.

Annual IEP Goals

Assistive technology information can be a part of the annual goal and short-term objectives/benchmarks on an IEP. How AT will contribute to achieving the goal and objectives must be clearly stated. The inclusion of AT in the IEP requires an explanation of how and why the child will use the technology to accomplish a particular goal. The device could be part of the conditions needed to accomplish the goal and objectives.

Criteria and instructions for developing goals and objectives can be found in the Policies and Procedures for Special Education in Oklahoma 1993, and the Federal Register, August 14, 2006, for the IDEA Amendments of 2004.

IEP Examples: Goals and Objectives

Academic Skill:

Dillon is a fourth-grade student with a learning disability, participating in the general curriculum, who is having problems with written expression.

Goal:

Using a word processing program on a computer with a spell checker, Dillon will make satisfactory passing grades in the fourth-grade general curriculum for language arts.

Objectives:

Dillon will use a spell checker in composing sentences and paragraphs and will not misspell any more than two words on his final drafts.

Dillon will receive grades no lower than 75% when using the word processor to develop and refine his composition skills and check for accuracy in punctuation, grammar, complete sentences, and one theme per paragraph.

Social Skill:

Katie is a sixth-grade student with moderate cognitive deficits and is nonverbal. As a result, she is experiencing problems communicating with peers in nonacademic settings.

Goal:

Using low-tech communication devices for social interactions, Katie will participate in nonacademic settings with nondisabled peers.

Objectives/Benchmarks:

By the end of the first nine weeks, Katie will use her picture communication wallet to talk with a minimum of two nondisabled classmates and one adult during sixth-grade lunch in the cafeteria on a daily basis.

By the end of the second nine weeks, Katie will use her picture communication wallet and a picture schedule to communicate and follow class instructions for satisfactory participation in art class.

AT as Supplementary Aids and Services

AT can be a supplementary aid or service to facilitate a student's participation in a general education class or other appropriate education setting. Students with disabilities have the right to an education in the least restrictive environment. To be successful in the least restrictive environment and to benefit from their education, students may need supplementary aids and services. Supplementary aids, which may allow a student to successfully participate in a regular education class or other education-related setting, include a variety of assistive devices that compensate for disability and allow the student to perform the required tasks.

AT is necessary as a supplementary aid and service if its use (along with other necessary aids) supports the student sufficiently to succeed in the current educational placement, and in the absence of the aid requires the student's removal to a more restrictive setting. For example, if a student with multiple physical disabilities makes progress on his or her IEP goals in the general education classroom with the use of a computer and an augmentative communication device, but cannot make progress in that setting without the devices, then those devices are necessary supplementary aids to be included in the student's IEP.

IEP Examples: Supplementary Aids and Services

Maggie will make oral presentations and participate in class discussions using an appropriately programmed electronic communication device.

Susan will use a computer and printer to complete all written assignments.

AT as Related Services

The IDEA requires that special education and related services be made available to all children and youth with disabilities that require them. Related services are defined as: CFR §300.34 "transportation, and such developmental, corrective, and other supportive services as are required to assist a child with a disability to benefit from special education . . ."

The related services that students with disabilities may require to benefit from special education include:

- (1) Audiology
- (2) Counseling services
- (3) Early identification and assessment of disabilities in children
- (4) Interpreting services
- (5) Medical services
- (6) Occupational therapy
- (7) Orientation and mobility services
- (8) Parent counseling and training
- (9) Physical therapy
- (10) Psychological services
- (11) Recreation

- (12) Rehabilitation counseling
- (13) School health services
- (14) Social work services in schools
- (15) *Speech-language pathology*
- (16) Transportation

The list of services is not exhaustive and may include other developmental, corrective, or support services if needed to benefit from special education. School districts may provide students with disabilities AT devices and services in conjunction with other related services. School districts must provide related services to a student with a disability at no cost to the parent.

For students to be successful with AT devices, they need to receive training on the use of the equipment. Training to use a computer, an augmentative communication device, or large print viewer, can occur as a related service, which supports the student's educational program. Training on AT devices may be written into the IEP as a related service.

Teaching a student to use AT devices may be addressed as part of other related services. For example, occupational therapy may ensure the student is correctly positioned to use AT devices and may provide opportunities for the student to learn to use a computer keyboard or a communication board.

IEP Example: - Related Services-

As part of his speech therapy program, Mark will receive instruction and learn to effectively use an electronic communication device during social conversation in the regular classroom environment.

Under the IDEA, a student must be receiving special education to receive related services. However, under Section 504 of the Rehabilitation Act of 1973 the student may receive auxiliary services without qualifying for special education.

Assistive Technology for Transition

Assistive technology can play an integral role in the transition process and facilitate greater independence for the individual moving into adult life. Transition services in IDEA are defined as follows:

34 CFR §300.43 Transition services. (a) Transition services means a coordinated set of activities for a child with a disability that—

- (1) Is designed to be within a results oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (2) Is based on the individual child's needs, taking into account the child's strengths, preferences, and interests; and includes—
 - (i) Instruction;
 - (ii) Related services;
 - (iii) Community experiences;
 - (iv) The development of employment and other post-school adult living objectives; and
 - (v) If appropriate, acquisition of daily living skills and provision of a functional vocational evaluation.
- (b) Transition services for children with disabilities may be special education, if provided as specially designed instruction, or a related service, if required to assist a child with a disability to benefit from special education.

The role of assistive technology is becoming more important throughout the transition process because of the increase in independence it can provide. Some people with disabilities need assistive technology to stay competitive with their nondisabled peers, while others require technology to interact independently within their environment.

SECTION 504 OF THE REHABILITATION ACT OF 1973

Section 504 of the Rehabilitation Act of 1973 does not specifically define AT devices or services nor use the term auxiliary aids and services. Reference to AT in Section 504 is limited to referral to "special education and related aids and services"; in the description of the delivery of an appropriate education and use of the term "supplementary aids and services"; and in the discussion of academic settings in which students with disabilities should be served. A student is not required to be eligible for special education services to be protected under Section 504. Section 504 also prohibits discrimination against individuals with disabilities and requires schools to provide equal access to their programs and services as follows:

34 CFR §104.33 Free appropriate public education

"General. A recipient that operates a public elementary or secondary education program shall provide a free appropriate public education to each qualified handicapped person who is in the recipient's jurisdiction, regardless of the nature of severity of the person's handicap.

(a) Appropriate education. (1) For the purpose of this subpart, the provision of an appropriate education is the provision of regular or special education and related aids and services that are designed to meet individual education needs of handicapped persons as adequately as the needs of nonhandicapped persons are met..."

34 CFR §104.4 Discrimination prohibited

(a) "General. No qualified handicapped person shall, on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity which receives or benefits from Federal financial assistance."

AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination against individuals with disabilities in areas of employment, public services, public accommodations, transportation, and communication. Title II of the ADA, which applies to schools as state or local entities, does not specifically define AT. It instead uses the term "auxiliary aids and services," including AT along with other services such as human supports. The definition of *auxiliary aids and services* includes the following:

28 CFR §35.104 Auxiliary aids and services

- (1) "Qualified interpreters, note takers, transcription services, written materials, telephone handset amplifiers, assistive listening devices, assistive listening systems, telephones compatible with hearing aids, closed caption decoders, open and closed captioning, TDDs, video text displays or other effective methods of making aurally delivered materials available to individuals with hearing impairments;
- (2) Qualified readers, taped tests, audio recordings, large print and Braille materials or other effective methods of making visually delivered materials available to individuals with visual impairments;
- (3) Acquisition or modification of equipment or devices; and
- (4) Other similar services and actions."

Title II of the ADA states those physical barriers in existing facilities must be removed, if removal is readily achievable. If not, school districts must offer alternative methods of providing the services, if they are readily achievable. In addition, equal access includes the provision of auxiliary aids and services that are needed for effective communication with individuals with disabilities. The specific ADA requirements are as follows:

28 CFR §35.160 General

- (a) "A public entity shall take appropriate steps to ensure that communications with applicants, participants, and members of the public with disabilities are as effective as communications with others.
- (b) (1) A public entity shall furnish appropriate auxiliary aids and services where necessary to afford an individual with a disability an equal opportunity to participate in, and enjoy the benefits of a service, program, or activity conducted by a public entity.
- (2) In determining what type of auxiliary aid and service is necessary, a public entity shall give primary consideration to the requests of the individual with disabilities."

Common Questions About Assistive Technology Devices and Services

What is the purpose of assistive technology in education programs?

The purpose of assistive technology is to facilitate the student's participation in his or her education program and to enable the student to benefit from the program. For example, the technology may provide an alternative means of completing work (e.g., word processing instead of writing assignments by hand) or an alternative means of learning, or it may provide access to the school program. Keeping the mandates of the 1997 and 2004 reauthorized IDEA in mind, assistive technology should support the student in the general curriculum and in the least restrictive environment to the greatest extent possible.

Should AT be considered for all students with disabilities?

Yes, under consideration of special factor the IDEA states "that the IEP team shall consider whether the child requires assistive technology devices and services."

Is AT required for all students who have an IEP?

No. IEP teams must make decisions regarding the student's need for AT on an individual basis and the decision must not be based solely on the disability category class of the student.

Who makes the decision if a student needs assistive technology devices or services?

The IEP team makes the decision of whether students need AT to benefit from their educational program. The IEP team may need to rely on an AT evaluation from a team of professionals. The team could include: a speech/language pathologist, occupational therapist, physical therapist, special education teacher, psychologist, computer specialist, hearing specialist, vision specialist. Some school districts may have an assistive technology team identified and trained to provide the assistive technology evaluation on a local level. Parent input and participation is important in the evaluation process and as a member of the IEP team.

How should the scope of the assistive technology evaluation and its components be determined?

A comprehensive AT evaluation is tailored to the individual student's needs. Depending on those needs, the evaluation might address communication, written work, seating, positioning, mobility, academic and nonacademic concerns, access to the general curriculum access to extracurricular activities, software and hardware options, environmental modifications, training, maintenance of the device and other issues specific to the student.

What are critical components of an assistive technology evaluation/assessment?

AT assessment is a systematic process to ensure that decisions regarding the selection of AT devices are based on information regarding the student's abilities, needs, environments, and tasks. AT assessment includes a team approach, assessment of

educational tasks and routines, and is ongoing in nature. Although most AT assessments are not standardized, the assessment process should be replicable and use a framework for effective decision making.

What is the role of parents in the AT assessment process?

Parents are members of the IEP team and provide input in all decisions regarding AT and the IEP. Parents, and the student, if appropriate, should be invited to participate in all aspects of the process. Parents have information about their child that other team members can use to fit, customize, and adapt technology to meet their needs.

What are the timelines for purchasing and/or providing assistive technology devices and services?

IDEA regulations do not specify a timeline for the provision of assistive technology. However, if AT is determined necessary for a FAPE then it must be provided in a timely manner. The school district may not delay or deny the provision of AT due to funding issues, if a child requires AT to benefit from the IEP.

Are personal use devices excluded?

The IEP team decides on a case by case basis what AT a student needs to benefit from special education and related services. With the exception of cochlear implants or other surgically implanted devices, if a device included in the IEP, the school is responsible for the provision of that device or ensuring that it is provided at no cost to the parents.

Who is responsible for buying assistive technology?

The school system is responsible for acquisition and provision of AT devices. Sometimes, parents may choose to purchase devices and send them to school with the student. Schools may use various funding sources to provide needed AT devices with parental consent, including but not limited to the following:

- Medicaid
- Medicaid Early, Periodic, Screening, Diagnostic, and Treatment
- Medicaid Home and Community Based Waiver
- Medicaid In Home Support Waiver
- Medicaid Tax Equity and Fiscal Responsibility Act (TEFRA)
- Private Insurance
- Department of Rehabilitation Services
- Financial Loan Programs
- Private/Community Resources

Who owns the assistive technology device?

It depends on who purchased the device. If the school purchased the device, the school maintains ownership. If the parents' private insurance or Medicaid purchased the device, then it belongs to the student.

May the student take home assistive technology devices purchased by the school?

Yes. As stated in the IDEA regulation 34 CFR §300.308 (b), "On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or

in other settings is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE." The IEP team will decide if a student requires the use of school-owned equipment in environments outside the school environment, including the student's home.

Who is responsible for maintenance and repair of equipment?

The local school district is responsible for repairing AT devices used as part of the student's special education and related services. The school system is responsible for ensuring that the student receives substitute equipment while his or her device is being repaired. Additionally, the school is responsible for ensuring that the external components of surgically implanted medical devices are functioning properly.

What provisions should be made while AT devices are being repaired?

It may not be possible to provide the same device in the interim. During the development of the student's IEP, IEP teams should identify: the steps to take if the device needs repairs; how they will secure a substitute system; and what other technology options, used on a temporary basis during the repair process, would offer an acceptable substitute to the student's device.

What provisions should be made for transfer of equipment when a student moves to another school or to a post-school program?

Local school districts should consider transferring the equipment with the student. Participating agencies should discuss the transfer of AT equipment for a student transitioning from school to post-school programs, using Memoranda of Understanding or Interagency Agreements between agencies that procure AT. Refer to Appendix B the Assistive Technology Devices Purchases/Sales Agreement Form and Sample Depreciation Spreadsheets.

What should happen when an assistive technology device is no longer appropriate for a student?

First, the IEP team should complete an AT evaluation to determine why the device is no longer working for the student. The IEP should also determine what, if any, AT the student needs and provide the necessary devices. School districts may then use the student's old device for another student or for a centralized loan program.

Do parents have the right to request a due process hearing over the provision of assistive technology?

Yes, AT devices and services contribute to an appropriate education for a child with disabilities, and are subject to the procedural safeguards required by the IDEA, including the right to request a due process hearing. As specified in the Policies and Procedures for Special Education in Oklahoma, parents or guardians may request a hearing to determine whether an educational program is free and/or appropriate for a child with disabilities, or a child alleged to have a disability.

What are assistive technology resources in Oklahoma?

The Oklahoma State Department of Education contracts with the Oklahoma Assistive Technology Center (OATC) for the Assistive Technology Program for Oklahoma Public Schools. OATC, provide a network of AT assistance, materials, and information through the Oklahoma Public Schools Assistive Technology Loan Program. OATC has locations in Oklahoma City and Tulsa they can be contacted by phoning (800) 700-OATC (6282). In addition, Oklahoma ABLE Tech is a federally funded state program that provides short term equipment loan program (lending library) demonstration centers, training and information and referral on assistive technology. Oklahoma ABLE Tech has partner locations in Oklahoma City and Tulsa as well as their main office at the OSU Seretean Wellness Center in Stillwater, their toll free number is (800) 257-1705.

APPENDIX A

ASSISTIVE TECHNOLOGY

CONSIDERATION CHECKLIST

RESOURCE GUIDE

Assistive Technology Consideration Checklist

School: _____

Student: _____

1. Complete the student information section below to provide information on the student's needs, abilities, and difficulties as well as environments and barriers
 Please check () the instructional or access areas in Column A that are appropriate for the student. Please leave blank any areas that are not relevant to the student. Specify all relevant tasks (e.g., copying notes from board, responding to teacher questions) within each area in the space provided. Check the settings in which the task is required: GEC: General Education Classroom SEC: Special Education Classroom COM: Community HOM: Home. In Column B, specify the standard classroom tools (low technology to high technology) used by the student to complete relevant tasks identified in Column A. Place a check () in the boxes in Column B if the student is able to independently complete the tasks with standard classroom tools. For areas in which the student can complete the tasks independently, it will not be necessary to complete Columns C-D. In Column C, specify the accommodations/modifications and assistive technology solutions that are currently being utilized. Place a check () in the boxes in Column C if the student can adequately complete the tasks specified in Column A using the identified accommodations/modifications and assistive technology solutions. Complete Column D if the student can not adequately complete the task with accommodations/modifications and assistive technology solutions specified in Column C.
Student needs, abilities, and difficulties:
Student environments:General Education Classroom (List all classes):
Special Education Classroom (List all classes):
Community (List all settings):
Home:
Barriers to student performance and achievement:
Darriers to student performance and achievement:

A. Instructional or Access Areas	B. Independent with Standard Classroom Tools	C. Completes Tasks with Accommodations/Modifications and/or Assistive Technology Solutions Currently in Place		D. Additional Solutions/Services Needed Including
		Accommodations/ Modifications	Assistive Technology Solutions	Assistive Technology
Writing				
□GEC □SEC □COM □HOM				
A. Instructional or Access Areas	B. Independent with Standard Classroom Tools	C. Completes Tasks with Accommodations/Modifications and/or Assistive Technology Solutions Currently in Place		D. Additional Solutions/Services Needed Including Assistive Technology
		Accommodations/ Modifications	Assistive Technology Solutions	
Spelling				
GEC SEC COM HOM Reading	П	П	Π	
☐ GEC ☐SEC ☐COM ☐HOM				
☐ Math ☐GEC ☐SEC ☐COM ☐HOM				
Study/Organizational Skills				
☐GEC ☐SEC ☐COM ☐HOM ☐ Listening ☐GEC ☐SEC ☐COM ☐HOM				

A. Instructional or Access Areas	B. Independent with Standard Classroom Tools	C. Completes Tasks with Accommodations/Modifications and/or Assistive Technology Solutions Currently in Place		D. Additional Solutions/Services Needed Including Assistive Technology
		Accommodations/ Modifications	Assistive Technology Solutions	<u> </u>
Oral Communication				
□GEC □SEC □COM □HOM				
☐ Aids to Daily Living				
☐GEC ☐SEC ☐COM ☐HOM				
☐ Recreation and Leisure ☐GEC ☐SEC ☐COM ☐HOM				
☐ Pre-vocational/Vocational ☐GEC ☐SEC ☐COM ☐HOM				
Seating, Positioning, and Mobility GEC SEC COM HOM				

A. Instructional or Access Areas	B. Independent with Standard Classroom Tools	C. Completes Tasks with A and/or Assistive Technolog	D. Additional Solutions/Services Neede Including Assistive Technology	
		Accommodations/ Modifications	Assistive Technology Solutions	
Other Specify:				
☐GEC ☐SEC ☐COM ☐HOM				
Student accomplishes tasks in all Student accomplishes tasks in all	instructional areas with accomm instructional areas with currently s in all instructional access areas	odations and modifications. No vavailable assistive technology.	s. No assistive technology is required assistive technology is required. Assistive technology is required. g assistive technology may be required.	
Consideration Checklist Completed by:	1	Position:	Date:	
Revised 09/27/00				

Assistive Technology Consideration Resource Guide

The following information is provided to assist educational teams in considering assistive technology in the development, review, and/or revision of a student's Individual Educational Plan. This document provides a framework for identifying relevant tasks within instructional areas as well as appropriate accommodations, modifications, and technology solutions. Additional tasks and solutions will need to be added to address individual student needs.

Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task and Expectations	Assistive Technology Solutions
Writing: Sample Tasks: Write name Copy letters/words/numbers for skills practice Write words from memory Copy print from book or worksheet Copy notes from board or overhead Complete written worksheets with single word responses (fill-in-the blank) Complete written worksheets with phrase or sentence response Complete written test with multiple choice response (circle/mark answer) Complete written test and forms with fill-in-the-blank response Complete written test with matching response Complete written test with phrase/sentence (short answer) Complete written test with essay response (multiparagraph)	 Crayon/Marker Pencil Pen Letter and number strip Clipboard Typewriter Computer with word processing software with grammar and spell checker Instructional software to remediate and enhance specific writing skills 	 Increased time for completing assignments Decreased length of assignment/number of responses Oral dictation as an alternative to writing Peer notetaker Format of assignment changed to meet need of student - multiple choice, matching word banks, fill-in-the-blank, short answer Word banks, sentence starters, and cloze format writing activities for supports Provide typed outline or typed copy of lecture notes to student prior to delivery for student to use to follow lecture Student highlights key points on printed copy of notes rather than copying/recording lecture notes Webbing-concept mapping strategy used 	 Pencil grip or other adapted writing aids Adapted paper (bold line, raised line, different spacing, secured to desk, paper stabilizers) Slant board Personal dry erase board Non-slip writing surface (e.g. dyceum) Tape recorder for dictated responses and notetaking Portable word processor (e.g. PC-5, AlphaSmart, etc.) Notetaking device (e.g. Braille, adapted tape recorder, smartboard) Computer with word processing software with spell and grammar checks (e.g. Microsoft Word) Computer with word processing software and outlining/webbing software (e.g. Inspiration or Kidspiration, DraftBuilder) Computer with graphic-based word processor (e.g. Writing with Symbols) Computer with talking word processing software (e.g. Write OutLoud, IntelliTalk) Computer with word prediction software (e.g. Co:Writer) Computer with graphic based word processor (e.g. Writing with Symbols) Scanner and computer with form filling software to create electronic worksheets *Adaptive input hardware and/or software (e.g. keyguard, keyboard utilities, enlarged keyboard, touchscreen, on-screen keyboard, trackball, switch access, voice dictation software, Braille input) and adaptive output solutions (screen enlargement, text or screen reading software) to be used as needed for all computer based writing solutions

Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task and Expectations	Assistive Technology Solutions
 Writing Sample Tasks(Continued) Record notes from teacher dictation/lecture with teacher recording notes on board/overhead Record notes from teacher dictation/lecture without teacher notes Generate creative/spontaneous writing samples Copy numbers Enter number in correct location within calculation problems Copy math calculation problems with correct alignment Record dictated math calculation problems with correct alignment Copy diagrams and graphs create and plot linear and quadratic equations on graph 	See previous page	See previous page	See previous page
Sample Tasks: Identify correctly spelled word from printed list Write spelling words from dictation Spell words orally Take a written spelling test Use spelling words appropriately in a sentence Locate correctly spelled words in a dictionary Complete writing tasks with correct spelling Identify/correct incorrectly spelled words in writing sample	 Flashcards Alphabet strip Print dictionary Computer with word processing software with built-in spell checker Instructional software to remediate and enhance basic phonics and spelling skills 	 Peer/adult assistance for difficult to spell words Personal or custom dictionary Problem word list Reduce number of spelling words Increased time for completing assignments 	 Personal dry erase board for practice Tape recorder with difficult to spell words recorded Hand-held spellchecker without auditory output (e.g. Merriam-Webster Dictionary and Thesaurus) Hand-held spellchecker with auditory output (e.g. Speaking Merriam-Webster Dictionary and Thesaurus) Portable word processor with built-in spellchecker (e.g. AlphaSmart) Computer with word processing program with spell check feature (e.g. Microsoft Word) Computer with talking word processing software containing speaking spell check (e.g. Write OutLoud) Computer with word prediction software, (e.g. Co:Writer))

Instructional or Access Area	Standard Tools	Modifications and	Assistive Technology Solutions
		Accommodations of	2,7
		Task and Expectations	
Reading: Sample Tasks: Identify letters in isolation and in sequence Recognize/read name Read basic/primer sight words Read functional words (community, emergency, grocery, etc.) Read target/selected words within a sentence Comprehend age/grade appropriate reading materials Read print materials from textbooks and supplemental materials with comprehension Read material from worksheet with comprehension Read material from computer display with comprehension Read longer reading samples with comprehension and without fatigue Answer literal questions regarding materials read Answer questions regarding main idea of materials read Answer inferential questions regarding materials read	 Textbooks Worksheets Printed information on board/overhead Printed test materials Instructional software to remediate basic reading and/or reading comprehension skills 	 Task and Expectations Peer/adult reading assistance High interest, low reading level materials Increased time for completing reading materials Decreased length of assignment Simplify complexity of text Color coding to emphasize key points (highlighting) Custom vocabulary list Increase print size of materials through photocopying 	 Page fluffers Slant board and book holders for positioning books Color Overlays Tracking strategies (e.g. reading window, bar magnifier) Speaking spellchecker or dictionary as a word recognition aid(e.g. Speaking Merriam-Webster Dictionary and Thesaurus) Reading Pen (e.g. Quicktionary Reading pen) Audio-taped books (e.g. books-on-tape from Recordings for the Blind and Dyslexic) Electronic books (e.g. disk or CD-ROM) Computer-based talking word processing program (e.g. Write OutLoud) Computer with graphic word processor (e.g. Writing with Symbols) Computer with text enlargement software (e.g. ZoomText) Computer with text reading software (e.g. ReadPlease, Talk-to-Me, JAWS, Kurzweil 1000) Computer-based advanced reading aids (e.g. Kurzweil 3000, WYNN) Solutions for converting text into alternative format (e.g. scanner with OCR software, Braille translation software, Braille printer/embosser, refreshable Braille displays, and tactile graphic production systems, etc.)



Instructional or Access Area Math: Sample Tasks: Identify numbers in isolation and sequence Comprehend basic math concepts Complete basic calculations (addition, subtraction, multiplication, and division) Complete complex math calculations Complete math word problems Tell time to the hour, half-hour, etc. using an analog and/or digital clock Calculate passage of time Identify coins and bills Demonstrates understanding of coin and bill value Utilize money to purchase items Utilize coins and bills to make appropriate change Maintain and balance a	Manipulative (beads, etc.) Abacus Number line Math fact sheet (e.g. multiplication facts) Calculator Instructional software to remediate and enhance specific math skills	Modifications and Accommodations of Task and Expectations Change format of assignment (e.g.: write answers only) Peer/adult reading of problem and recording of answer Reduce number of problems Provide additional spacing between problems Provide additional time to complete tasks Increase size of print through photocopying Change complexity of material (e.g. separate problems by operations required) Teacher/peer support for reading and assistance	Modified paper (bold line, enlarged, raised line, graph paper, etc.) Talking calculator with speech output Calculator with large print display Calculator with large keypad Calculator with embossed output (e.g. Braille N Speak) Computer based on-screen calculator Electronic math worksheet software with adaptive input and output as needed (e.g. MathPad, Access to Math, and Study Works) Adapted measuring devices (e.g. devices with speech output, large print display, or tactile output)
checkbook Study Organizational Skills:	Instructional materials, including software to remediate deficit areas, to teach compensation strategies, and focus on strengths	 Assignment sheet provided by peer and/or adult Outlines of key points Student schedule or checklist Positioning student strategically within classroom environment Timers Student self monitoring sheets 	 Print or picture schedule Organizational aids (e.g. Color coding, appointment book, etc.) Tape recorder Electronic organizer/personal digital assistant (e.g. Step Pad, PalmPilot) Computer based electronic organizer with adapted input and output provided as needed Speech prompting device

Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task and Expectations	Assistive Technology Solutions
Listening: Sample Tasks: Follow verbal directions Listen to stories, books, etc. and answer comprehension questions Listen to classroom discussion and apply information (answer questions, record notes, etc) Listen to teacher lecture and apply information (answer questions, record notes, etc) Listen to verbally presented information and retell with correct sequencing and facts Listen to videos to gather information about current instructional topics Respond to environmental stimuli appropriately (someone knocking on classroom door, bell ringing, fire alarm)	 Television Video player Cassette recorder/player Headphones for clarity of sound and blocking of extraneous noises for cassette/ television Overhead projector to provide visual outline during note taking Closed captioning access to caption ready television and video presentations 	 Preferential seating Use teacher proximity Elimination of extraneous noise (air conditioner) Break directions into smaller steps/segments Use verbal prompts Use gestures Pre-teach vocabulary and/or components of the lesson Audio-tape verbally presented information for repeated presentation Use visual aids (picture symbols, diagrams, maps) to illustrate key points Provide a written outline of lecture Use a peer note-taker to record notes in class Provide print copy of script in videotapes Provide sign language/oral interpreter 	 Personal amplification system Classroom sound field system Auditory trainer Personal hearing aids Tape recorder with indexing capability Smart Board for transferring teacher written notes to student computer for viewing and printing and viewing Environmental alert system Voice to text software application for converting teacher lecture to text Closed captioning on non-caption ready instructional materials Real time captioning of class lecture and discussion

Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task and Expectations	Assistive Technology Solutions
Oral Communication: Sample Tasks: Gain attention of peers/adults within environment Express basic wants/needs Request assistance as needed Provide appropriate greetings Participate in conversation with peers/teachers Respond appropriately to teacher/peer questions and/or comments Provide oral report in class on assigned topic Inform others of events, topics, etc	Organizing diagram for presentations	 Interpreter Verbal prompts Modeling appropriate skills Repetition of spoken answers Additional response time Provide questions before time Accepting shortened responses 	Speech enhancing devices (e.g. amplifiers, clarifiers) Augmentative communication solutions (e.g. object based communication displays, picture communication boards, books, and wallets, talking switches, dedicated augmentative communication devices, and integrated computer based augmentative communication solutions-all with adaptive input as needed) Sign language
Aids to Daily Living: Sample Tasks: Feed self using appropriate utensils Drink using appropriate utensils Prepare simple snack Prepare basic meal Dress and/or undress self using appropriate tools Complete personal hygiene and grooming tasks (brushing teeth, hair, etc.) Toilet self Perform simple household chores	 Eating utensils (ex. spoon, cup, etc.) Personal hygiene tools (ex: toothbrush, comb, brush, etc.) Toileting supplies (ex: tissue) Bathroom rails and adaptive faucet handles Cleaning materials and appliances 	 Verbal prompts Modeling appropriate skills Picture cures and prompts Additional time to complete tasks Modification of task length and complexity 	 Adapted eating aids (e.g. grips for standard eating utensils, adapted cups/glasses, etc.) Feeding machines Adapted dressing aids (e.g. button holers, pulls for zippers, Velcro fasteners, etc.) Adapted cooking and food preparation aids (e.g. blender attached to power control unit, adapted pouring handles, etc.) See other sections of this document for leisure, vocational, mobility, and learning aids.) Adapted household cleaning tools and appliances



Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task and Expectations	Assistive Technology Solutions
Seating, Positioning, and Mobility: Sample Tasks: Move about/ambulate about the classroom, school, and/or community Manipulate educational materials as required in assigned activities Maintain appropriate seating/position for participation in relevant activities	Classroom chairs, desks and tables	 Limit mobility requirements through careful scheduling of daily activities (order, location, etc.) Peer and adult assistance Modification of requirements based upon student's daily energy level and the task to be completed 	 Adaptive classroom equipment (e.g. prone and supine standers, side lyers, adapted chairs with seating modifications and support, etc.) Adapted tables and desks Walkers Crutches/canes Manual wheelchairs Power wheelchairs Laptrays and equipment mounts
Recreation and Leisure: Sample Tasks: Participate in play activities Participate in leisure activities (ex: look at/read book or magazine, listen to music, etc.) appropriately Manipulate and/or operate toys, tools, and/or electronic appliances required for participation in leisure activities appropriately	 Puzzles Games Toys Music (e.g. tape player, CD-ROM, etc.) 	 Verbal prompts Adult peer assistance Modeling appropriate skills Cooperative participation with Game modification 	 Knobs for puzzles Adapted crayon holders Adapted books Adapted music with symbols Raised line coloring sheets Spinners for games Switch accessible toys (commercially available or switch accessible through switch interface) Environmental control devices Power control units and battery adapter devices Adaptive sports equipment Computers with adaptive input devices as needed and appropriate software to address leisure skills
Pre-vocational and Vocational: Sample Tasks: Complete assigned tasks (ex: filing, sorting, assembly, etc.) within designated timelines Utilize tools, manipulative, and/or equipment to complete tasks Complete single and multiple step tasks	 Sorting and assembling materials Office equipment Computer with standard office applications Timers and watches 	 Verbal prompts Picture and word cues Modeling appropriate skills Cooperative participation with peers and adults Student self-monitoring sheets Modification of task length and complexity 	 Individualized task and material modifications to meet student needs Computer with adaptive input devices as needed and appropriate software to address prevocational or vocational needs Vibrating and talking watches and timers Auditory prompting with and without visual display

Instructional or Access Area	Standard Tools	Modifications and Accommodations of Task Expectations	Assistive Technology Solutions
Recreation and Leisure: Sample Tasks: Participate in play activities Participate in leisure activities (ex: look at/read book or magazine, listen to music, etc.) appropriately Manipulate and/or operate toys, tools, and/or electronic appliances required for participation in leisure activities appropriately	 Puzzles Games Toys Music (e.g. tape player, CD-ROM, etc.) 	 Verbal prompts Adult peer assistance Modeling appropriate skills Cooperative participation with Game modification 	 Knobs for puzzles Adapted crayon holders Adapted books Adapted music with symbols Raised line coloring sheets Spinners for games Switch accessible toys (commercially available or switch accessible through switch interface) Environmental control devices Power control units and battery adapter devices Adaptive sports equipment Computers with adaptive input devices as needed and appropriate software to address leisure skills
Pre-vocational and Vocational: Sample Tasks: Complete assigned tasks (ex: filing, sorting, assembly, etc.) within designated timelines Utilize tools, manipulative, and/or equipment to complete tasks Complete single and multiple step tasks	 Sorting and assembling materials Office equipment Computer with standard office applications Timers and watches 	 Verbal prompts Picture and word cues Modeling appropriate skills Cooperative participation with peers and adults Student self-monitoring sheets Modification of task length and complexity 	 Individualized task and material modifications to meet student needs Computer with adaptive input devices as needed and appropriate software to address pre-vocational or vocational needs Vibrating and talking watches and timers Auditory prompting with and without visual display

APPENDIX B

ASSISTIVE TECHNOLOGY DEVICES

PURCHASE/SALES AGREEMENT FORM

SAMPLE DEPRECIATION SPREADSHEETS

Agreement for the Purchase/Sale or Statement Declining the Sale of Assistive Technology Devices by Oklahoma School Districts/Public Agencies

Statement of Purpose for Agreement

The school districts and public agencies that are signatories to the agreement, hereinafter referred to as "the Parties," recognize the need for continued use of assistive technology devices that were originally purchased for individual students when the student moves from one school district to another or transitioning to other public agency service systems.

As a result, the parties hereby agree to the continued use of such devices by the student when the student changes school districts or transitions to other public agency service systems. Such continued use can be through one of the following methods: (a) by transfer or sale of the devices by the school district or agency to the student's new school district; (b) by the transfer or sale of the devices by the school district or agency to the student or the student's parents or legal guardians; or (c) by any other legal means that are acceptable to the student, and the parties to the agreement.

The parties further agree that in the event of a transfer or sale of assistive technology devices, they may use the "Agreement for the Purchase/Sale or Statement Declining the Sale of Assistive Technology Devices by Oklahoma School Districts and Public Agencies."

All transfers or sales of assistive technology devices will be made according to applicable state and federal law, rules, and regulations.







Agreement for the Purchase/Sale or Statement Declining the Sale of Assistive Technology Devices by Oklahoma School Districts/Public Agencies **Check Appropriate Box:** Purchase/Sales agreement, between school districts or between a school district and a public agency or parents. If box is checked, complete Section A. Declining sales of assistive technology devices(s). If box is checked, complete Section B. Section A _agrees to sell "as is" the assistive technology device(s) school district or public agency described below to ______for use by___ purchasing school district, public agency, or person child/client name Description and Price of Device(s): Price set by: Appraisal Current Market Value Other* *If checked, explain_ Price determined by calculations as set forth in the Addendum. is not liable for any nonconformities in the device(s) after school district or public agency it is purchased by the individual's new school district, agency or parent/individual person. signature of superintendent or authorized official of district or public agency selling assistive technology Date signature of superintendent or authorized official of district or public agency, or person purchasing assistive technology Date

Section B					
declines to sell the assistive technology device(s) school district or public agency					
equested by					
requesting school district, public agency, or parent/individual person					
nfor the following reasons:					
The assistive technology device is currently being used by another child (children)(client(s).					
The assistive technology device is a "general use" device and is not available for sale. It has been/is being modified for other children/clients.					
1 Other					
gnature of superintendent or authorized official of district or public agency Date					

Sample Device Depreciation Spreadsheets

Assistive Technology Device	Estimated Useful Life*	Device Age	Estimating Remaining Life	Original Purchase Price	Depreciation	Current Value
Alpha Smart Pro	5	2	3	\$279.00	\$111.60	\$167.40
Macintosh cable	7	2	5	\$10.00	\$2.86	\$7.14
downloading software	7	2	5	\$19.00	\$5.43	\$13.57
Carry case	7	2	5	\$25.00	\$7.14	\$17.86
			TOTAL	\$333.00	\$127.03	\$205.97

^{*}Note: Computers/AAC devices utilizing computer technology: 5 years.

Other types of devices: 7 years.

The Alpha Smart Pro is a word processing keyboard that the school purchased to implement a student's IEP writing objectives. The cable and software enable the student (or teacher) to upload information from the keyboard to computer or vice-versa.

The above example illustrates how the depreciation model works for this package of device when the device in question is 2 years old. The depreciation is figured by taking the original purchase price (\$279) and dividing it by the estimated useful life (5). The figure attained (\$55.80) is multiplied by the device age (2) and subtracted from the original purchase price (\$279.00). This figure will be the current value (\$167.40) for the remaining life. Spreadsheet examples that continue on the next page, age other device packages to provide an idea of how this process works for a range of devices.

Formula

Original Purchase	\$279.00	Original Purchase	\$279.00
Price		Price	
Estimated Useful Life	(÷) 5	Subtotal II	(-)111.60
Subtotal I	\$55.80	Current Value	\$167.40
Device age	(x) 2		
Subtotal II	\$111.60		

Assistive Technology Device	Estimated Useful Life*	Device Age	Estimating Remaining Life	Original Purchase Price	Depreciation	Current Value
Kenx (Morse Code)	5	2	3	\$780.00	\$312.00	\$468.00
Write Outloud	7	2	5	\$99.00	\$28.29	\$70.71
Spec Switch	7	2	5	\$42.00	\$12.00	\$30.00
Biggy curser	7	2	5	\$99.00	\$28.29	\$70.71
Track Pad	7	2	5	\$99.00	\$28.29	\$70.71
			TOTAL	\$1,119.00	\$408.87	\$710.13

*Note: Computers/AAC devices utilizing computer technology: 5 years. Other types of devices: 7 years.

Assistive Technology Device	Estimated Useful Life*	Device Age	Estimating Remaining Life	Original Purchase Price	Depreciation	Current Value
Tactile/texture-based symbols	7	2	5	\$15.00	\$4.29	\$10.71
One-step communicator (2)	7	2	5	\$200.00	\$57.14	\$142.86
Tactile symbols mounted on switch caps (10)	7	2	5	\$50.00	\$14.29	\$35.71
Power Link	7	2	5	\$180.00	\$51.42	\$128.57
Switch	7	2	5	\$42.00	\$12.00	\$30.00
Switch Interface	7	2	5	\$135.00	\$38.57	\$96.43
			TOTAL	\$622.00	\$177.72	\$444.28

^{*}Note: Computers/AAC devices utilizing computer technology: 5 years.

Other types of devices: 7 years.